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New 1,2-bis(diphenylphosphine)ethane appended nickel(II) 1,2-dithiosquarate: A potent molecular electrocatalysts for oxygen and hydrogen evolution reactions

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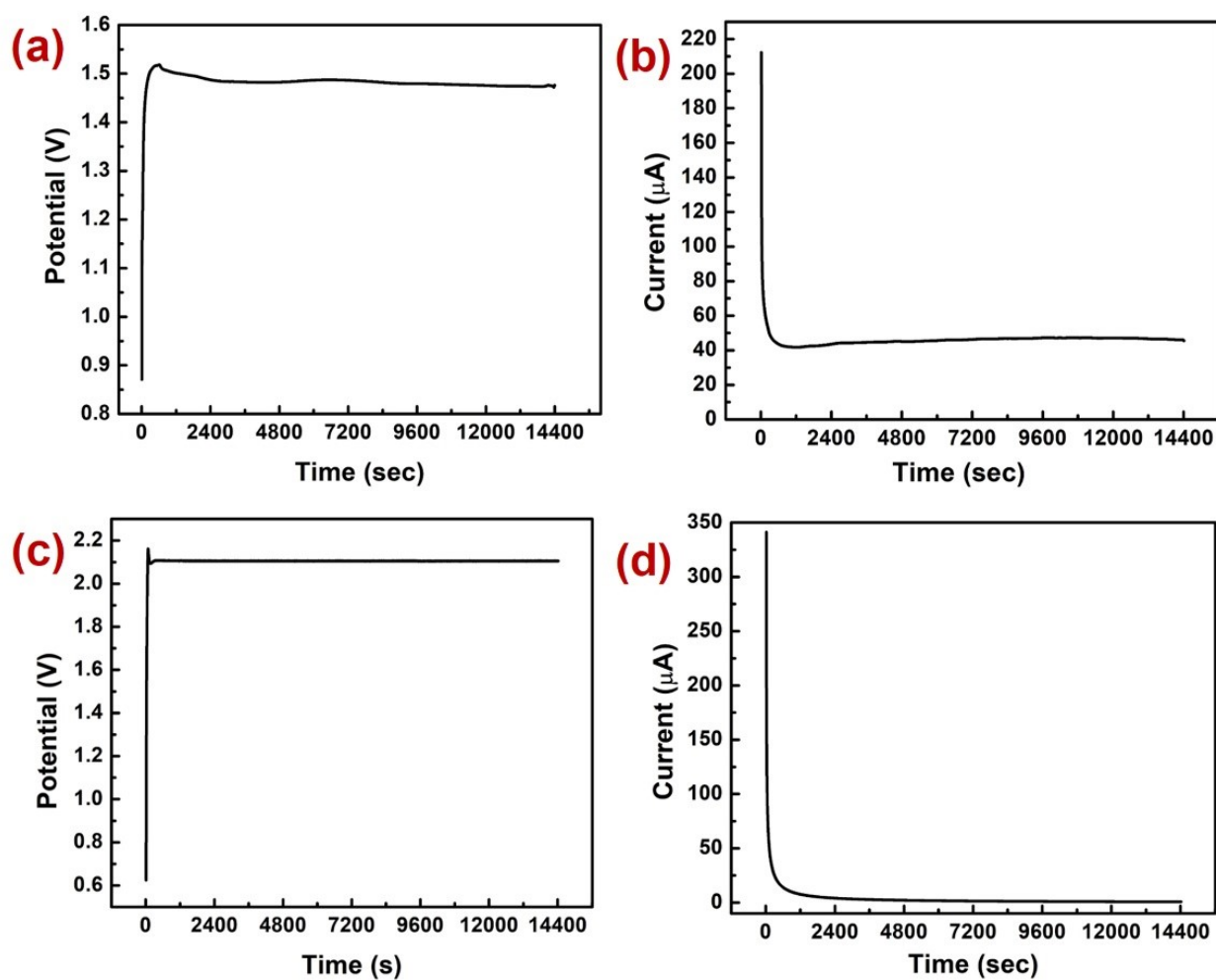


Fig. S1 (a) Chronopotentiometric (performed at 7×10^{-3} A) and (b) Chronoamperometric (performed at 0.9 V) plot in 0.1 M KOH; (c) Chronopotentiometric (performed at 7×10^{-3} A) and (d) Chronoamperometric (performed at 0.5 V) plot in 0.5 M H₂SO₄.

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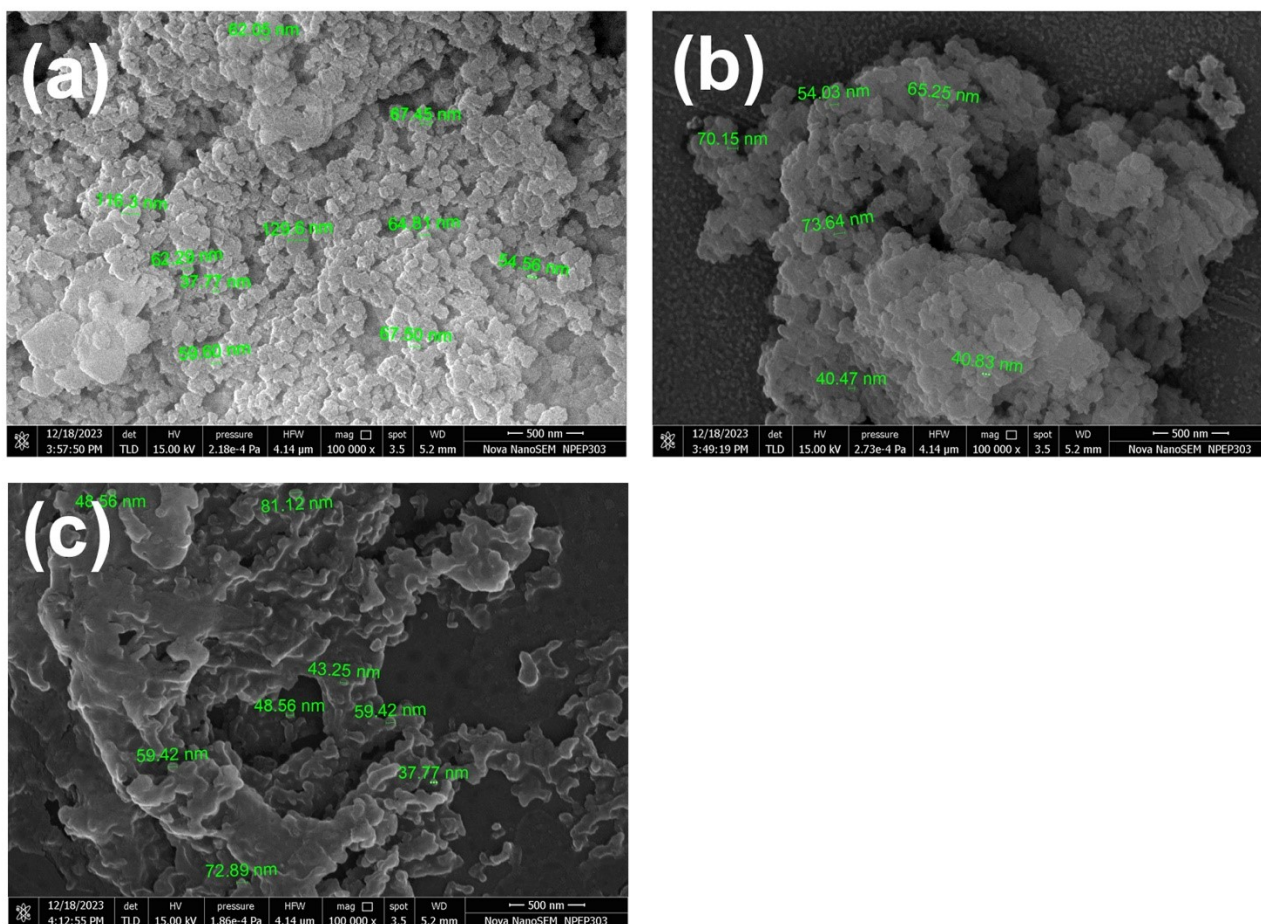


Fig. S2 FESEM images for **Nidtsq** (a) Before OER and HER electrocatalysis; (b) after OER electrocatalysis; (c) after HER electrocatalysis.

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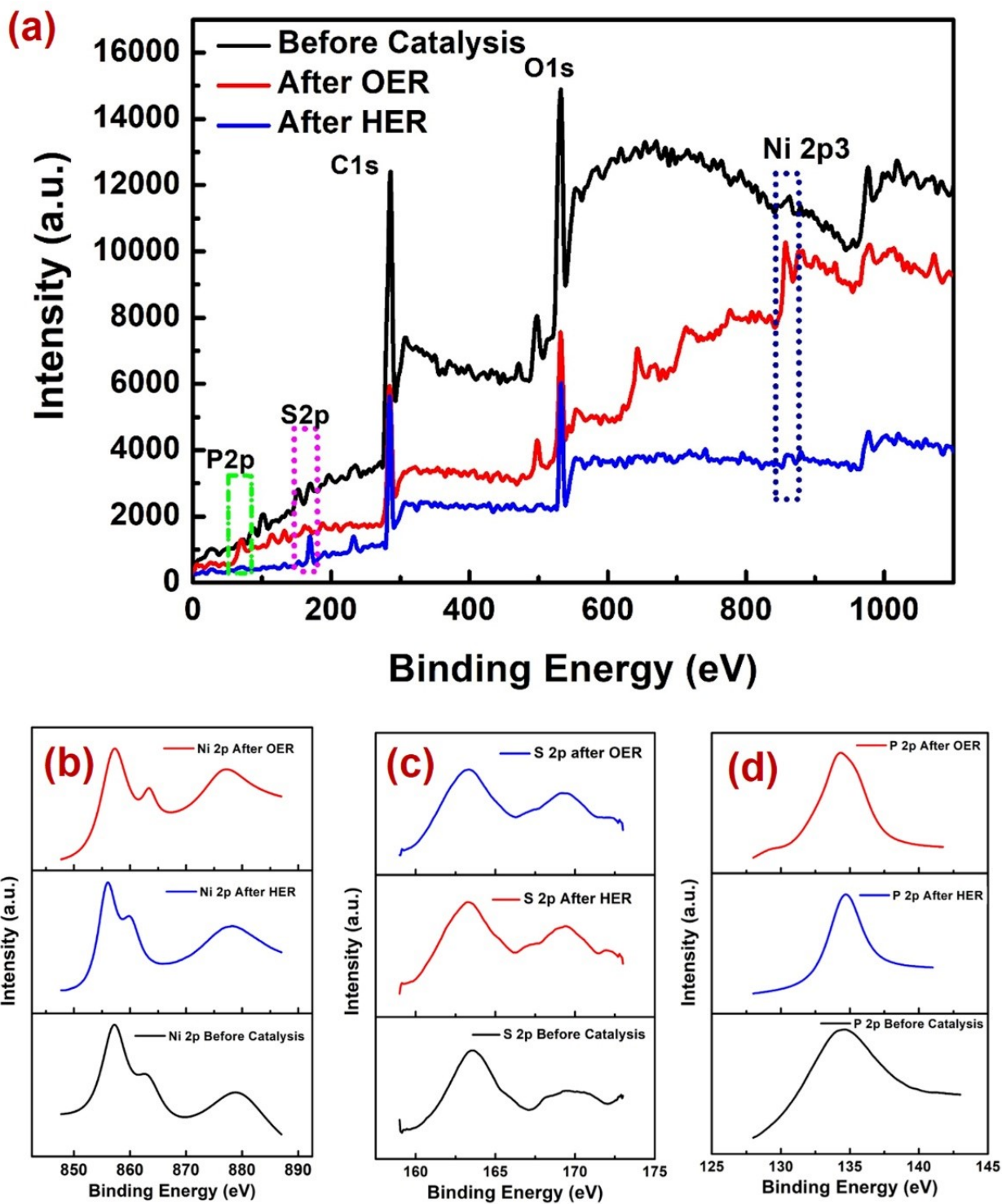


Fig. S3 (a) The full XPS survey spectra for **Nidtsq** before and after OER and HER electrocatalysis; the deconvoluted (b) Ni 2p; (c) S 2p and (d) P 2p XPS spectra for **Nidtsq** recorded before catalysis as well as after OER and HER.